

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Elaborate a simple ASP.NET web application that allows users to convert multiple currencies. Explain the steps involved in developing this application.
17. Design a web page that includes a calendar control and allows users to schedule appointments. Explain how the validation is performed and how it enhances the user experience.
18. Imagine you are building an e-commerce website. Design and implement a component that aggregates order information from multiple tables in the database.
19. Determine and implement a user control in C# that allows users to upload and validate image files in a web application. Discuss the key functionalities and event handling mechanisms required for this user control.
20. Justify and implement a web application using C# and ADO.NET that retrieves data from a database table and allows users to perform insert, update, and delete operations on the data.

APRIL/MAY 2024

DCA43/GCA43 — WEB APPLICATIONS
USING C#

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Define ASP.NET and explain its significance in web application development.
2. Find the purpose of the web.config file in an ASP.NET application?
3. List the concept of web controls in ASP.NET.
4. What is the purpose of the AutoPostBack property in web controls?
5. What is component-based programming in the context of web applications?
6. Explain the concept of properties and state in component-based programming.
7. Define user controls in the context of web applications using C#.

8. What is the purpose of creating a simple user control in C#?
9. List the purpose of ADO.NET in web applications using C#?
10. How can you obtain a sample database for practicing data access in C#?

PART B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) Classify the role of the web form in ASP.NET and its advantages over traditional HTML pages.

Or

- (b) Describe the concept of server controls in ASP.NET and provide an example of an HTML server control and a Web server control.

12. (a) Discuss the different types of web control events in ASP.NET and explain how the Postback Events work.

Or

- (b) Explain the functionality and usage of the Calendar control in ASP.NET. How can you format and restrict dates in the Calendar control.

13. (a) Outline the process of creating a simple component in C# for use in web applications.

Or

- (b) Explain the important aspects of properties and state management in component-based programming. Provide an example to illustrate your answer.

14. (a) Demonstrate the steps involved in creating a simple user control in C# for a web application.

Or

- (b) Discuss the role of Visual Studio's custom control support in the development of C# web applications.

15. (a) Explain the process of performing simple data access in ADO.NET, including retrieving data from a database and displaying it in a web application.

Or

- (b) Discuss the steps involved in updating data in a database using ADO.NET, including the use of insert, update, and delete commands.